



OTVARC Oscillator

The Oregon Tualatin Valley Amateur Radio Club Newsletter

July 1993

From the President's Desk

By Dale Mosby, N7PEX

This has been a busy month, starting with SeaPac and ending with Field Day. I enjoyed SeaPac, sharing a table with W7IPP. I ran into a friend from Vancouver at SeaPac. Rick, N7WXE, is someone I have known for many years but haven't seen for quite some time. He has had his license about a year and his wife just got her license a week or so after SeaPac. We visited for a while and I told him that I can be found on the 146.90 repeater quite often. Since then we have had many nice conversations during our commutes. I also ran into Gregg Kershul, K7OKL, someone I haven't seen for about 20 years. Turns out that he has been a ham many more years than that.

I am writing this the weekend before Field Day and find myself getting quite excited about that event. Field Day is my favorite event of the year, and this one will find me on a mountain top in the coast range. I've been enjoying hearing the "Radio Oregon" group (K7RO) on the '.90 repeater making their Field Day plans. I'm sure that group is also hoping for great weather. I hope to hear some good field day stories at the next club meeting.

For those of you that have been following along with the saga of the Mount McKinley climb, I am happy to report that the group made it to the summit. Eric, KB7TSN, will be showing some of his slides at a club meeting later this year so you will get to see what it was like up there.

..... Continued at right

At the Next Meeting:

Wednesday, July. 7: Board meeting. 7PM - location is at Geno's (KA7KBH) place. Contact any board member for address.

Club meeting July 14. This month's program is on packet radio, given by N7VZF. Bill has been highly active in packet, including many mobile emergency packet operations with ARES.

Inside This Issue:

- DSP, DSP, DSP
- Repeater Update
- Field Day Wrap Up
- Classified Ads
- OTVARC Contacts
- Membership Renewal Form
- Much, much more....

I know I had a more comfortable spot working 20 meters here at home, but Eric had the better view. I have seen a few of these slides and they are spectacular. Dave, N7VKC, and I received a bunch of thank you notes from Eric's class. It is easy to see their enthusiasm for Amateur Radio in the letters. I encourage all of you to share this great hobby with kids when ever possible.

I hope to see you all at the next meeting and to hear some great Field Day stories.

73, Dale, N7PEX

Field Day Wrap Up

by Doug Reeves, N6XHW

As the *Oscillator* goes to press, hams across the country are celebrating the end of another successful ARRL field day as are those who attended the 1993 OTVARC field day effort..

Overall, 42 hams showed up to operate AA7CP, the club's field day station call, and brought over 15 visitors, some of whom were YLs, perspective hams and other "civilians".

Over 420 HF phone contacts were made with the majority of those made on 15 and 20 meters using 2 and 3-element beams and an R7 vertical. CW was also active, with over 190 contacts of 15 and 20 meters. The main station operated two rigs from battery power only, making it a class 2A.

The Novice/Tech station, KB7SVB, racked up 85 phone 10 meter contacts despite poor band conditions and over 20 CW contacts, mostly on 40m.

Bill, AA6QL brought his impressive mobile Oscar station, giving the club 28 satellite contacts and intriguing many hams on the future of using satellites during field day. Additionally, Bill's station was used to make several packet contacts.

Even mother nature cooperated, with the rain holding off until just after the contest was finished.

The club wishes to thank Red, AA7CP, and Leon KB7SVB for "donating" their calls, as well as all of you who donated equipment and time to make another field day a success.

Repeater Update

by Wes Allen, K7WWG

About three weeks ago, my friend Bob, W7IPP, Bob's son Matt and his roommate Rusty, Dale, N7PEX, and myself assisted in the final lift to put the 146.900 Repeater antenna to it's final height on the tower. It is now at the 120' level on Bob's 150' tower.

We also changed the feed line to 7/8" hardline. From reports that I have received and some from tests that I have done, the machine is working really good. I worked it from the turn-off to the Hood River bridge on June 15th. Marty, KD7LA has been working it with an HT in Salem. Mary Jo, KB7NJE has noticed that she can receive and work it much better on her commute to McMinnville each work day.

I am very pleased by this improvement in coverage. I want to thank all of those who have helped with this project to know that I am very grateful for the help and support.

W9GR DSP Info

The program topic at the last meeting was the Digital Signal Processor (DSP) designed by Dave Hershberger, W9GR. Tom Hill, WA3RMX, gave a great presentation on the operation of the unit, and then we allowed people to hear the results of the box. The response was great and the order forms provided quickly disappeared. I gave out the address to a few more people there and took some follow up phone calls. For those that wanted an order form but did not get one, you can order the DSP Kit with Multi-Program Chip for \$125.00 plus Shipping and Handling (\$ 7.00). Send to: Quantics, P.O. Box 2163, Nevada City, CA 95959-2163

Hello, I must be going

by Alan Churchill, AA7CV

Who? Yes, I really still live. I'm even in front of a computer terminal long enough to write this. I've missed you all and this is an explanation of where I've been for the first half of this year.

First of all, It's Not My Fault!! I learned from my kids to lead with that line. It never does any good but at least it puts you on the offensive instead of the defensive.

It's actually the Spotted Owl that has to do with my disappearance. It started back in November. I got a call from my old employer (the nicest guy in the world next to Stan) who said that his business was really picking up and he needed a trainer for all the new computer installations they were doing. I loved that company and I loved working with lumber retailers and wholesalers (their clientele) so by early January we came to terms and I took on the job of installer/trainer for my old company.

Then all Sweepstakes broke loose.

As we all know, there is quite a shortage of lumber due to "The Owl". Well, it's not all due to that critter. We're still shipping logs to Japan like there is no tomorrow and half our mills had already been closed and been dismantled so there wasn't anyone to cut up logs up anyway. You would think with all this shortage, any working mill would cut any piece of sage brush it could find but mill owners saw something else coming.

Supply and Demand.

Starting about in January, prices for dimensional lumber started to climb MUCH faster than they had in previous month or even years. In fact, over the last six months,

lumber prices look like a vertical line on the charts. What sold for \$1 a board foot six months ago now goes for over \$4. The mills cut as little as they could because they knew the price they could get would be 10% higher next week.

What this did to our customer base (and prospect base) was to force the issue of finally getting computerized so they could keep up with these prices that changed hourly. As an example of how crazy it is, I was waiting to go to lunch with a lumber broker client. He had a lumber order to place but decided to wait until after lunch. He didn't want to keep me waiting. In the hour and a half we took for lunch, his lumber order went up in price by \$10,000. He commented that was a darn expensive lunch. Fortunately he didn't go dutch.

The bottom line of all this is that our company has been flooded with orders (good news) who all want them installed NOW (bad news). I have been working 16 hour days, 6 days a week and when I do get home, all I do is sleep. Ham Radio is a sweet memory right now and I won't surface until this craziness with lumber prices stabilizes.

So, thank you to Doug and Al (and others) who have kept the newsletter going, thank you to Jim AAAADH and others for taking over the selling of books at Rickreall, thank you to Dale and the other members of the board for stepping in to get good programs lined up for the club. Thank you to the Sea-Pac committee for basically doing all my work while I've been away. The sad news is that the backlog of work now extends into September so I know I'm QRT until next year. The good news is that Hillory has told Bill to DO SOMETHING about the lumber crisis.

73 and see you at the Christmas party.

Alan, AA7CV

OTVARC Club Contacts

OTVARC Executive Board

President	Dale Mosby	N7PEX	640-0217
Vice Pres	Alan Churchill	AA7CV	639-5660
Secretary	Brad Beach	N7NVC	657-1781
Treasurer	Carl Clawson	WS7L	629-5796
Trustee	Al Berg	WB7SIC	640-5456
Trustee	Dave Morrison	W7JXU	645-8788
Trustee	Ira Rubin	KF7QS	244-3070
Trustee	Lynn Hurd	WB7UNU	649-9152
Trustee	Wes Allen	K7WWG	649-3295

Other Club Contacts

ARRL Coordinator	Bob Orr	WF7Q	297-2732
Bunny Hunting	Dale LeBarron	W7FBP	638-7768
Contesting	Open		
DX News	Rich Jones	KG7FS	645-9417
Equipment Valuation	Randy Stimson	KZ7T	297-1175
Equipment Trustee	Al Berg	WB7SIC	640-5456
Emergency Services	Tim Taylor	N7UCA	292-6830
Field Day	Carl Clawson	WS7L	629-5796
Health & Welfare	Pat Griffiths	KA7UFG	649-0837
Member Badges	John Klein	KA7ICV	281-0798
Newsletter Editor	Alan Churchill	AA7CV	639-5660
Newsletter Layout	Doug Reeves	N6XHW	833-8504
Newsletter Distribution	Al Berg	WB7SIC	640-5456
Nomination of Officers	Alan Roehl	KO7B	292-5243
Project Night	Open		
Public Relations	Bill Merwin	N7VZF	644-1974
Public Service	Randy Stimson	KZ7T	297-1175
Repeater	Wes Allen	K7WWG	649-3295
RFI & TVI	Dale Mosby	N7PEX	640-0217
Satellites	Red Robert	AA7CP	357-5747
Scholarship	Pat Griffiths	KA7UFG	649-0837
Sea-Pac	Al Berg	WB7SIC	640-5456
	Brad Beach	N7NVC	657-1781
	Jim Schaeffer	KB7ADH	245-2518
	Alan Churchill	AA7CV	639-5660
Technical	Joe Boyd	N7VZS	678-2188
Tower Ordinances	Stan Griffiths	W7NI	649-0837
Trailer	Dee Lynch	KA7NPN	646-4580
Training (Code)	Tom Durell	KG7RD	
Training (Novice/Tech)	Dave Morrison	W7JXU	645-8788
Training (Upgrade)	Joe Boyd	N7VZS	678-2188
VE Testing	Alan Roehl	KO7B	292-5243
VE Test Schedule	John Klein	KA7ICV	281-0798
VHF/UHF	Bill Roth	N7RYW	297-7605

OTVARC Club Information

Purpose: The Oregon Tualatin Valley Amateur Radio Club, a non-profit corporation, wants to be instrumental in helping the prospective as well as established Amateur to become a proficient communicator in the Amateur Radio Service.

Additionally, the intent is to promote the advancement of Amateur Radio Service through the following five objectives:

1. Education & training of new and licensed Amateurs.
2. Public Service during public events & community activities.
3. Emergency communications during emergencies & disasters.
4. Hobby enhancement through meetings, nets & contests.
5. Social contact with other amateurs & interested persons.

Special Service Club: OTVARC is an ARRL Special Service Club. The ARRL grants us this distinction due to our participation in emergency preparedness exercises, public service events and other service-oriented programs. In addition, continuing educational and training programs are conducted for FCC licenses. OTVARC benefits from you joining the ARRL through OTVARC. To join or renew your membership in the ARRL, contact the treasurer at any regular meeting.

Newsletter: The OTVARC Oscillator is the club newsletter. It is published monthly and is usually mailed on the first of the month. The opinions, views and recommendations of its contributors are not necessarily those of the Club, it's officers, advertisers or the Editorial Staff.

Correspondence: All correspondence may be sent to OTVARC, PO Box 5132, Aloha, OR 97006-0132.

Advertising: Classified ads are free to all paid up members. Display ads are available to approved commercial interests. To place an ad, mail your camera ready copy to the address above and indicate the size desired. All display ads run for six months at a time from July through July and July through December. All ads must be paid for in advance. Rates for 1993 are as follows:

Full Page	8" X 10"	\$200 for 6 months.
Half Page	8" X 5"	\$125 for 6 months.
Qtr Page	4" X 5"	\$75 for 6 months.
Bus Card	2" X 3"	\$35 for 6 months.

Meetings: We have two meetings per month. The board meeting is on the first Wednesday of each month. All club business is conducted at this meeting. All members are welcome to attend. Contact the President for location and time. The General Meeting is on the second Wednesday of each month at the Beaverton Elks Club, 3500 SW 104th Ave (1 block off Canyon road). Meetings start at 7PM. If you would like to come early, you can get a nice meal from the Elks for less than \$6.

Membership: OTVARC is open to anyone who breathes. You do not need to be a licensed radio amateur to join our group. Dues are as follows: Full member, \$10/yr; Associate member (nonlicensed), \$10/yr; Family members of full member, \$5/yr; Life memberships available - see Treasurer. Only full members and life members may vote on club business and serve as club officers. All memberships expire on the last day of the calendar year. If you would like to join during the year, see the club Treasurer for reduced dues.

How to Join: Simply mail the Member Application and Renewal Form along with your dues to the address above.



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FOR SALE OR TRADE OR WANTED

Much New And Used Equipment for sale.

The following is **used**:

2m 5/8 Wave Ground Plane	\$ 20
3-1000Z Amp/P.S. Needs work.	\$150
Rohn BPC25G Concrete Base Plate	\$ 20

The following is **new**:

Rohn HBU Universal House Bracket	\$ 20
Rohn GB45G Guy Bracket	\$ 50
Rohn TB50 Tower Bushing	\$ 5
Rohn TB75 Tower Bushing	\$ 5
Rohn AB Wood Block Bearing	\$ 5
Rohn EP253 Guy Equalizer Plate	\$ 15
Rohn EP255 Guy Equalizer Plate	\$ 15
Rohn DT25 Drive Tool	\$ 5
Rohn M200H 10' H.D. Galv. Mast	\$ 20
Certificate Frames, 11 x 14	\$ 2

Call Stan Griffiths, W7NI, 649-0837

Computer for sale: Amiga 500, 1M RAM, 52M hard drive, C64 emulator, IBM emulator, 5.25" IBM drive, 5.25" C64 drive, color monitor, software. Call Don Kinney, WA7JRT at 324-9835.

Volunteer Needed for explorer Scout Post to assist in communications training. Contact Mary Low Hadwic, Search and Rescue Post #700. 735-9128.

Wanted: Guest Operator for Conests to assist "rusty" tester. Contact Mike Ault, NV7F 531-0675.

For Sale: Comodore C64 with 1541 disk drive, B&W monitor, TNC emulator. Make offer to Janet Bell, WB7FTC at 648-8821.



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Imagine...

Next month you could be reading
your ad here ... along with the rest
of OTVARC ...

Contact Dale Mosby, N7PEX for more
information

Every Day DSP

By Alan Churchill, AA7CV

At the June OTVARC meeting we had a real treat. Tom Hill demonstrated his Digital Signal Processing (DSP) box he built from a kit. He gave us some live on-the-air demonstrations and our ears couldn't believe it. On CW, stations that overlapped each other were separated as if by magic. On SSB, stations in the mud came up to clearly understandable status. This is definitely a receiving addition we will all use in the future.

After the meeting I had a chance to talk to Tom more about the technology that makes DSP possible and if it could be modified somewhat for other uses. Together we sketched out some software and hardware changes that we thought might allow an "every-day" use of DSP.

I ordered my kit, put it together in one evening and checked it out. No problem on CW or SSB. It did everything I hoped for but then I couldn't resist. I warmed up the soldering iron and fired up the PC for a little reprogramming. I was stepping into uncharted waters here. I was inventing the EVERY-DAY DSP UNIT. After days of testing and adjustment here is what I came up with.

The front panel has a new three position switch. It is marked "College Kid", "Wife", and "Boss". I use this switch to select what kind of input I am listening to. I then added a mic and preamp for input to the DSP. Earphones are used as output to keep the translations secret. The custom software I wrote receives input from the mic, translates it to what is REALLY meant and outputs to the earphones. Here are some examples of recent tests.

With the input switch set to College Kid, I phoned our son in Eugene where he is just finishing his first year at U of O. Here is what was actually said. "Hi Son, How's it going?" "Fine Dad. Finals are almost over and I'm looking forward to seeing you again." The DSP unit correctly interpreted this as "Oh, It's you. I am out of money. Please send money. I can't wait to get home so you can give me some more money."

With this accurate translation in mind I wanted to try it out on the "Wife" setting. I started a conversation with Linda as soon as dinner was over. "I think I'll stop by HRO tomorrow morning and see if they have any new magazines" Linda's voice response was "Don't you even THINK of buying any more ham radio gear. After your CHECK BLOW-OUT at Sea-Pac we don't have enough money left to pay the garbage service which is where your entire station is going if you even go near any radio store!" The DSP unit correctly translated her voice input as follows. "Oh, honey, that sounds like fun. Why don't you take the checkbook so if you see something you like, you won't have to wait to get it. I heard garbage rates are going down so we can easily take care of that bill and any others. Why, with the money you made at Sea-Pac selling your 2 panel meters we probably have lots of extra money." Wow! This really worked.

I next called my boss. "Hi Bruce, are there any new consulting jobs I am supposed to go on this month?" His voice answer was "Oh, just a few. They are fairly close together geographically. Mostly experienced computer users so you shouldn't have any trouble. If you do well with these there might be a bonus in it for you." The DSP unit took over and gave me the REAL translation.

Please see *DSP...*, page 7

DSP...

from page 9

"We have 7 new computer installs for you to do in the next 3 weeks. They are close together relative to the placement of the planets. One of the users saw a computer in a store window once but the rest of them don't know how to spell BIT. Also, the salesman sold these so cheap that there isn't a penny of bonus money available. Thanks for calling in. Can you be in Anchorage tomorrow morning?"

There you have it. I hope this article gives you some ideas for future enhancements to the basic DSP technology.

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Daily Net Listing for Two Meters

by Bill Roth N7RYW

145.27	Daily	5:50 AM	Weather Net
145.27	Daily	4:24 PM	Weather Net
146.78	Daily	7:30 PM	Dist 4 ARES (Corvallis)
147.32	Daily	6:05 PM	Traffic and training net.
147.32	Daily	7:30 PM	District
145.27	Mon.	8:30 PM	YL & Ladies Net
146.84	Mon.	7:00 PM	Portland ARC news.
146.86	Mon.	7:00 PM	ARES net.
147.00	Mon.	8:00 PM	CCRA Service net.
145.27	Tue.	6:00 PM	DX Linkup to the East
145.27	Tue.	9:00 PM	Computer Net
146.90	Tue.	7:00 PM	WA Co. ARES Net
147.24	Tue.	8:00 PM	Swap n Shop
145.19	Wed.	8:00 PM	NW Astronomy Net
145.27	Wed.	8:00 PM	Intertie Checkin
147.28	Wed.	7:30 PM	Hoodview ARC net.
145.27	Thur.	7:00 PM	Intertie Technical
145.27	Thur.	9:00 PM	NAPRA Packet Ragchew
145.35	Thur.	7:30 PM	Swapnet & Newslane.
146.64	Thur.	7:15 PM	Yamhill Co. ARES
146.86	Thur.	7:00 PM	ARES net.
145.27	Fri.	8:00 PM	Youth Net.
145.27	Sat.	9:00 AM	Swap Net
145.27	Sat.	12:00 PM	Nightowls Net
145.27	Sun.	10:00 PM	Astronomy Net

1993 OTVARC MEMBERSHIP APPLICATION AND RENEWAL FORM

Name _____ Call _____

Address _____ Class _____

City, State, Zip _____ Home Phone _____

You may combine your ARRL membership and OTVARC membership. We handle all the details and it makes money for the club. Thanks.

OTVARC New Membership..... \$12/yr.

OTVARC Renewal..... 10/yr

OTVARC Associate..... 10/yr.

Family Member..... 5/yr

Life Membership..... See Treasurer.

ARRL Membership..... 30/yr.

ARRL (65 & older)..... 24/yr.

ARRL Family Member..... 12/yr.

OTVARC Total \$ _____

ARRL Total _____

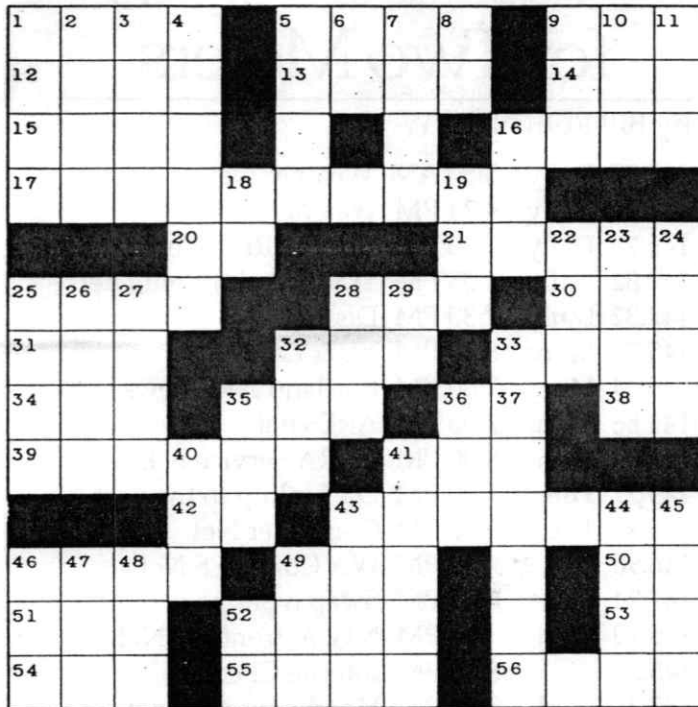
Grand Total _____

Date Paid _____

Check Number _____

Mail to: OTVARC P.O. Box 5132 Aloha, OR 97006-0132

Crossword Puzzle



Across

- 1 Short _____ radio
- 5 Part of a battery
- 9 Resistance measure
- 12 Asian nation
- 13 Recording trade group (abbrev.)
- 14 Aviation authority (abbrev.)
- 15 Mysterious character
- 16 Negative
- 17 Manicuring tool
- 20 Large appliance mfr. (abbrev.)
- 21 In addition to
- 25 Simple
- 28 Promise
- 30 Yale Man
- 31 Leonard
- 32 Ultraviolet
- 33 Famous canal
- 34 Amateur radio operator (abbrev.)
- 35 American WWI force
- 36 Return postage (abbrev.)
- 38 Baseball league
- 39 Scanner in auto
- 41 Campground organization
- 42 Long Island (abbrev.)
- 43 Pirate pitcher Kent
- 46 Black hair style
- 49 Five twice
- 50 Alfred's nickname
- 51 General Accounting Office
- 52 _____ wave (200 kHz)
- 53 Sideband, for short
- 54 Sea fish
- 55 Spanish for 1 across
- 56 Natural antenna mount

Down

- 1 Essential antenna compo
- 2 Plant type
- 3 Wind indicator
- 4 Power
- 5 Sea creature
- 6 Electronic index
- 7 Soviet automobile
- 8 Olympic site (abbrev.)
- 9 Office of French Information
- 10 Chinese people
- 11 Floor cover
- 16 Large alarm company (abbrev.)
- 18 Hear _____!
- 19 Fight _____!
- 22 She
- 23 Former Cub manager Lee
- 24 Cambodian currency
- 25 Western bad guy Jack
- 26 Of aviation
- 27 Feels superior
- 28 Venezuelan Air Force
- 29 Expression of surprise
- 32 Radio Exterior de Espana
- 33 Shoulder ornament
- 35 Former heavyweight champ
- 36 South Korea (abbrev.)
- 40 International Labour Org.
- 41 Soviet Asian city
- 43 Inclination
- 44 Decorative container
- 45 European river
- 46 Automatic gain control
- 47 Federal Agriculture Org.
- 48 Fishing tool
- 49 Two thousand pounds
- 52 Short for low

Universal Time Conversion To Local Time

UTC	Pacific		Mountain		Central		Eastern	
	Standard	Daylight	Standard	Daylight	Standard	Daylight	Standard	Daylight
0000	4		5		6		7	8
0100	5		6	PM	7		8	9
0200	6		7		8		9	10
0300	7		8		9		10	11
0400	8		9		10		11	12
0500	9		10		11		12	1
0600	10		11		12		1	2
0700	11		12		1		2	3
0800	12		1		2		3	4
0900	1		2		3		4	5
1000	2		3		4		5	6
1100	3		4		5		6	7
1200	4		5	AM	6		7	8
1300	5		6		7		8	9
1400	6		7		8		9	10
1500	7		8		9		10	11
1600	8		9		10		11	12
1700	9		10		11		12	1
1800	10		11		12		1	2
1900	11		12		1		2	3
2000	12		1		2		3	4
2100	1		2	PM	3		4	5
2200	2		3		4		5	6
2300	3		4		5		6	7
2400	4		5		6		7	8

Notes: *Evening of date prior to UTC date.
 *Same date for both local and UTC.

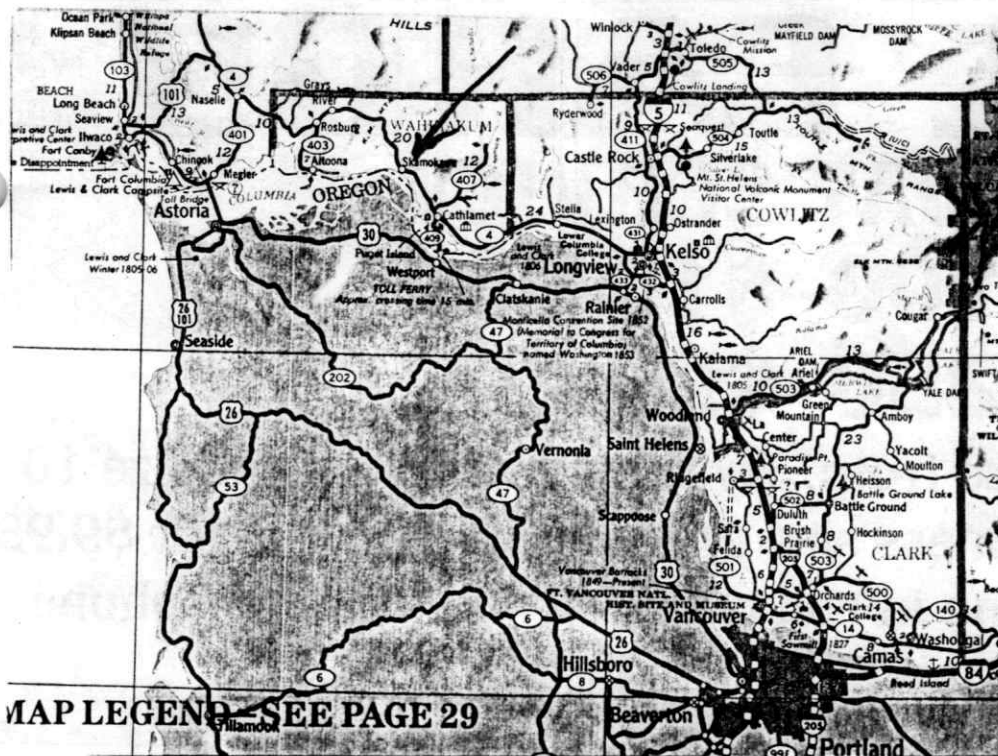
HELP & WANTED !!!

I need one 10 ft. sect. of Rohn 25G tower. In decent condition! I also need a tower man to put the section up. AND--install a tri-band beam. Free lunch and beverages for those who can help me out. Some time in July or Sept.. Can pay a reasonable amount if needed.

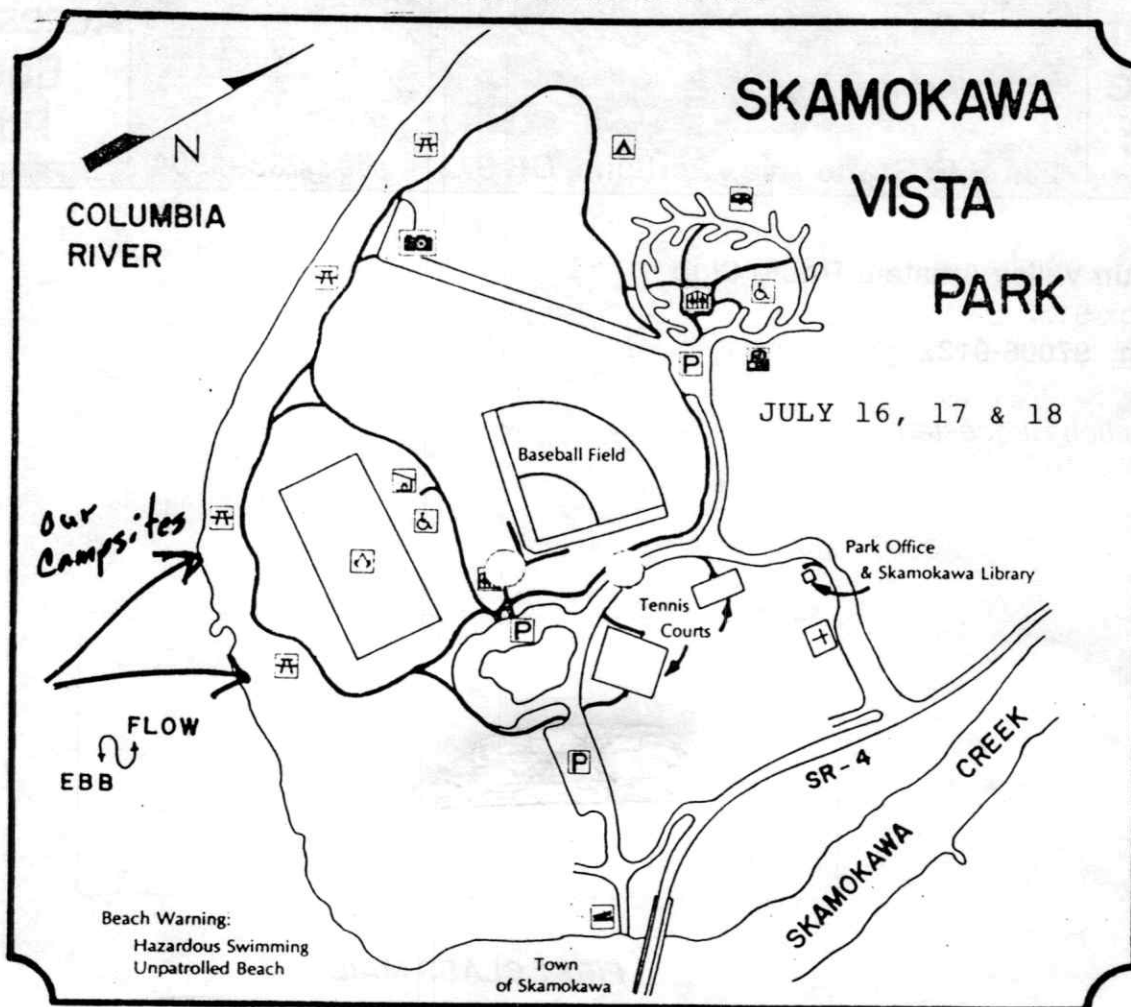
Al WB7SIC

640-5456

(call me chicken)*



OTVARC TRAVELERS CAMPOUT



Watch Huge Oceaongoing Ships Sail By. A bit south of Mount St. Helens, the state's southwest region is the gateway to the Columbia Gorge National Scenic Area. Sky-scraping basalt cliffs and dense forests meet the blue waters of the working river, teeming with boats, barges, tugs and ships.

The main shipping channel runs very near the river's banks along S.R. 4, which leads to the Long Beach Peninsula. Pull off the road and watch oceaongoing freighters pass just out of reach.

A bridge from Puget Island leads to Cathlamet, a picturesque Scandinavian community with freshly whitewashed barns and herds of dairy cows. It is home to the only ferry to cross the waters of the lower Columbia River from Washington to Oregon.

Further west on S.R. 4 is Skamokawa, once called "Little Venice" because it was built around the many tributaries of Skamokawa Creek. It was

one of the first communities born on the Columbia River, and now is a national historic district.

SATURDAY NITE HAMBURGER FEED!! WE NEED TO KNOW HOW MANY ATTENDING?? PLEASE CALL MARVEL AT 292-3261...

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